

REMARKS

Reconsideration of the above identified application in view of the preceding amendments and following remarks is respectfully requested. Claims 1 and 4-21 are pending. By this Amendment, Applicants have amended Claims 1 and 20, cancelled Claim 3 and added new Claim 21. The claim amendments were made to more precisely define the invention in accordance with 35 U.S.C. 112, paragraph 2. These amendments have not been necessitated by the need to distinguish the present invention from any prior art. It is respectfully submitted that no new matter has been introduced by these amendments, as support therefore is found throughout the specification and drawings.

In the Office Action, Claim 20 was objected to for depending from a cancelled claim. The dependency has been corrected hereby and withdrawal of the objection is respectfully requested.

In the Office Action, Claims 1, 3-9, 13, 14, and 16-20 were rejected under 35 U.S.C. §102(e) over U.S. Patent No. 6,745,038 to Callaway, Jr. et al. (Callaway). The Examiner's grounds for rejection are herewith traversed, and reconsideration is respectfully requested.

Callaway discloses a method for a wireless device in a piconet 100 having slave and master devices. Briefly, Callaway estimates the distance between master and slave devices only in accordance with RSSI (i.e., a reception level). A Power control algorithm is applied so that received RSSI values are used to determine null location. The null information is used to compute the delta f value, and the path length difference, d, to determine location of the master device (see column 6, lines 26-51). As can be seen in Figure 7, the method of Callaway requires a reflector 710 to determine the essential

path length difference according to the formula $d=(b+a)-c$. At column 8, lines 7-10, Callaway notes that the accuracy of the resulting calculation is only fair.

Further, as the Examiner points out, Callaway uses the RSSI values in conjunction with transmitted power levels. However, Callaway does not suggest using the transmitted power levels to calculate a difference of any kind. Rather, Callaway uses the transmitted power level simply to maintain power levels within a set tolerance (see col. 7, lines 23-41).

In contrast, Claim 1 recites, *inter alia*, a wireless communications apparatus including reception level acquisition means for acquiring respective reception levels of wireless signals transmitted from at least one mobile terminals, transmission level acquisition means for acquiring respective transmission levels of the mobile terminals, difference value calculation means for calculating respective difference values between the transmission levels and the reception levels and relative distance estimation means for estimating a relative distance to the mobile terminal in accordance with the respective difference values. Consequently, the relative distance estimation is according to a different technique than that of Callaway, which does not disclose or suggest such a technique of creating a difference value between a transmission level and a reception level. Accordingly, for at least this reason that the transmission level is used in the distance estimation, Claim 1 and each of the remaining claims depending therefrom distinguish the subject invention from Callaway. Therefore, withdrawal of the rejection is respectfully requested.

Additionally, amended Claim 1 also recites wherein the reception level acquisition means measure the respective reception levels of the wireless signals and the

transmission level acquisition means retrieve respective transmission levels of the mobile terminals contained in the wireless signals. For an exemplification of this aspect, the Examiner is directed to the description associated with Figure 4 at pages 24-26 of the subject application. Callaway discloses no such mechanism of embedding transmission levels in a wireless signal to facilitate generating a subsequent difference value. Accordingly, for at least this additional reason, Claim 1 distinguishes the subject invention from Callaway and withdrawal of the rejection is respectfully requested.

Turning to new Claim 21, it recites a wireless communications apparatus according to Claim 1, wherein the reception level acquisition means retrieve respective reception levels of wireless signals sent from the wireless communications apparatus to the at least one mobile terminals contained in the wireless signals of the at least one mobile terminals and the transmission level acquisition means measures a transmission level of the wireless communications apparatus to the at least one mobile terminals. For an exemplification of this aspect, the Examiner is directed to the description associated with Figure 5 at pages 24-27 of the subject application. Callaway discloses no such mechanism of embedding reception levels of the wireless communications device in the wireless signal of the mobile device to facilitate generating a subsequent difference value. Accordingly, for at least this additional reason, Claim 21 distinguishes the subject invention from Callaway and withdrawal of the rejection is respectfully requested.

In the Office Action, Claims 10-12, 16, 17 and 20 were rejected under 35 U.S.C. § 103 (a) over Callaway or in view of U.S. Patent No. 5,963,866 to Palamara et al. (Palamara). The Examiner's grounds for rejection are herewith traversed, and reconsideration is respectfully requested.

It is respectfully submitted that Palamara does not overcome the deficiencies of Callaway, as noted above with respect to Claim 1. In particular, neither Callaway nor Palamara disclose or suggest, either alone or in combination, in whole or in part, a wireless communications apparatus including, *inter alia*, difference value calculation means for calculating respective difference values between the transmission levels and the reception levels and wherein the transmission level acquisition means retrieve respective transmission levels of the mobile terminals contained in the wireless signals. Accordingly, Claim 1 and each of the claims depending therefrom are not rendered obvious by the combination of references cited by the Examiner and withdrawal of the rejection under 35 U.S.C. §103 (a) is respectfully requested.

In the Office Action, Claims 15, 16 and 17 were rejected under 35 U.S.C. § 103 (a) over Callaway. The Examiner's grounds for rejection are herewith traversed, and reconsideration is respectfully requested.

As noted above, Callaway uses the RSSI values in conjunction with transmitted power levels but does not suggest using the transmitted power levels to calculate a difference of any kind. Rather, Callaway uses the transmitted power level simply to maintain power levels within a set tolerance (see col. 7, lines 23-41).

In contrast, Claim 1 recites, *inter alia*, difference value calculation means for calculating respective difference values between the transmission levels and the reception levels, relative distance estimation means for estimating a relative distance to the mobile terminal in accordance with the respective difference values and wherein the transmission level acquisition means retrieve respective transmission levels of the


mobile terminals contained in the wireless signals. Callaway does not teach or suggest this. Consequently, for at least these reasons, Claim 1 and each of the claims depending therefrom distinguish the subject invention from Callaway and withdrawal of the rejection is respectfully requested.

Any additional fees or overpayments due as a result of filing the present paper may be applied to Deposit Account No. 04-1105. It is respectfully submitted that all of the claims now remaining in this application are in condition for allowance, and such action is earnestly solicited.

If after reviewing this amendment, the Examiner believes that a telephone interview would facilitate the resolution of any remaining matters the undersigned attorney may be contacted at the number set forth herein below.

Respectfully submitted,

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